

Research on improving veterinary management of wildlife



Faculty of Veterinary Science

Fakulteit Veeartsenykunde Lefapha la Diseanse tša Bongakadiruiwa

With the increasing need to conserve biodiversity, and an increase in game ranching, veterinarians are regularly called on to capture wildlife and do veterinary procedures that require chemical immobilization, anaesthesia, translocation, medical treatment and rehabilitation. The risks of morbidity and mortality occurring during these procedures is still unacceptably high, and, therefore, to improve animal welfare and conservation it is critical to do basic research to understand the effects of these procedures and then apply this knowledge to reduce these risks and improve these procedures.

Chemical capture:

- Understanding how capture drugs compromise an animal's cardiorespiratory systems.
- Establishing novel drug protocols for preventing and treating cardiorespiratory compromise.
- Establishing novel drug combinations to safely and effectively immobilize and anaesthetise African wildlife.

Rhino:

- Establishing the effectiveness and conservation value of rehabilitating orphan rhino.
- Determining how capture and translocation affects an animal's physiology and wellbeing.
- Improving rhino translocation by establishing what makes a successful translocation.
- Understanding how severe hypoxia occurs during chemical immobilization of rhino.
- Establishing the best treatment for respiratory compromise during rhino immobilisation.

Consequences of capture and capture myopathy:

- Understanding the short and long-term consequences of capture.
- Determining parameters which can indicate whether an animal may suffer postcapture.
- Determining the mechanisms that cause capture myopathy and establishing effective treatments.

Medical management and conservation physiology:

- Determining reference intervals for haematology and biochemistry of African wildlife.
- Establishing the impact of climate change on the ecophysiology of African wildlife.

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